

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

(Attorney Docket No. 7135USO3)

In re the Application of: )  
Raymond P. Silkaitis )  
Serial No.: 10/783,640 ) Group Art Unit: 3626  
Filed: February 20, 2004 ) Examiner: Sorey, Robert A.  
For: Medication Management System ) Confirmation No.: 7339

## APPEAL BRIEF

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## **I. REAL PARTY IN INTEREST**

The real party in interest is Hospira, Inc.

## **II. RELATED APPEALS AND INTERFERENCES**

Applicant is not aware of any related appeals or interferences.

## **III. STATUS OF CLAIMS**

Claims 14-17 and 19-24 are pending and stand rejected. The rejection of claims 14-17 and 19-24 within the Final Office Action mailed June 9, 2011 (*Final Office Action*) is being appealed. A clean set of the pending claims is attached in the Claims Appendix.

## **IV. STATUS OF AMENDMENTS**

No claim amendments have been filed subsequent to the Final Office Action mailed June 9, 2011.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

Of the currently pending claims, claim 14 is independent. Claims 15-17 and 19-24 are (directly or indirectly) dependent on claim 14.

Claim 14 is independent and is directed to a system for administering medication to a patient comprising an infusion pump (*see, e.g.*, Specification p. 14 ln. 23-33; p. 15 ln. 13-25; Fig. 4A) comprising: a pump housing (*see, e.g.*, Specification p. 16 ln. 4-23; Fig. 13-15), a processor that acts as a web server disposed in the pump housing (*see, e.g.*, Specification p. 4 ln. 4-23; p. 42 ln. 5-16; Fig. 4A), wherein the processor is configured to communicate with a web browser

client device that is remote from the infusion pump (*see, e.g.*, Specification p. 3 ln. 6-9; p. 11 ln. 7-11; p. 25 ln. 6-10; p. 42 ln. 5-16), a unitary dual function touch screen display located on the pump housing and in communication with the processor (*see, e.g.*, Specification p. 16 ln. 12-23; p. 37 ln. 12-15; p. 42 ln. 5-16), wherein the dual function touch screen display comprises a first portion and a second portion (*see, e.g.*, Specification p. 39 ln. 21 to p. 40 ln. 26; p. 41 ln. 22 to p. 42 ln. 4; p. 42 ln. 5-16), wherein the first portion is configured to display a pump information screen (*see, e.g.*, Specification p. 19 ln. 20-31; p. 21 ln. 30 to p. 22 ln. 8; p. 42 ln. 5-16; Fig. 12-15) and wherein the second portion is configured to concurrently display a web browser screen (*see, e.g.*, Specification p. 42 ln. 5-16).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Claims 14-17, 19, and 21-24 stand rejected under 35 U.S.C. § 103 as being unpatentable over US Pub. 2002/0038392 (De La Huerga) in view of USP 7,154,397 (Zerhusen).

Claim 20 stands rejected under 35 U.S.C. § 103 as being unpatentable over US Pub. 2002/0038392 (De La Huerga) in view of USP 7,154,397 (Zerhusen) and USP 6,208,974 (Campbell).

## **VII. ARGUMENT**

### **A. Response to Rejection of Claims over De La Huerga and Zerhusen**

Claims 14-17, 19, and 21-24 were rejected under 35 U.S.C. § 103 as being unpatentable over US Pub. 2002/0038392 (De La Huerga) in view of USP 7,154,397 (Zerhusen). Applicant asserts that the subject matter in the claims as a whole would not have been obvious in view of De La Huerga and Zerhusen.

1. **The combination of De La Huerga and Zerhusen does not describe an infusion pump comprising “a processor that acts as a web server disposed in the pump housing, wherein the processor is configured to communicate with a web browser client device that is remote from the infusion pump”, as in independent claim 14**

The Office stated that the “web server” limitation of claim 14 was met by De La Huerga in paragraph 145 including a description of a controller portion of the pump including a processor and accessible memory; and in paragraph 149 including a description of the processor linked to a communication channel 255 such as an intranet or the Internet for communication with other facility or remote computing and storage devices. (*Final Office Action*, p. 2-3).

The Office further stated that the common meaning of “web server” has been applied to the claim limitation, and a web server is defined by its function. The Office cited to Microsoft Press Computer Dictionary Third Edition for a definition of web server as “On the internet or other network, a computer or program that responds to commands from a client. For example, a file server may contain an archive of data or program files; which a client submits a request for a file, the server transfers a copy of the file to the client”. (*Final Office Action*, p. 11). The Office stated that in De La Huerga, the processor on the infusion pump is linked to a communication channel 255 such as an intranet or the Internet for communication with remote computing devices, and that in Figure 17, De La Huerga shows the Internet communication channel 255 in direct communication with controller 260. The Office further stated that De La Huerga teaches that the controller 260 is employed to retrieve information from the pumps and control the pump units—hence, De La Huerga’s pump unit including the processor act as a server and meet Applicant’s broad limitation of a web server. (*Final Office Action*, p. 11).

Applicant asserts that the Office’s interpretation of De La Huerga is incorrect. In Figure 17 of De La Huerga, the pump 100 is connected to the channel 255, and in Figure 26, De La

Huerga illustrates that the channel 255 (255a-c) connects the pump 100 to the controller 260. De La Huerga describes that the communication channel 255 (255a-c) is wired cables (*see* [0195]). In Figure 26, communication channel 255a-c are not the “Internet”. In contrast, the pump 100 is connected to the controller 260, which itself is connected to the network 272. The controller 260 accesses a remote server via network 272 [0224]. De La Huerga further describes that the controller 260 is linked to pumps 100a, 100b, etc., via a hardwire cable or the like 255 and is also linked via network 272 to a server that archives all standing infusion orders [0243].

Using the Office’s meaning of “web server” of “*On the internet or other network*, a computer or program that responds to commands from a client … for example, a file server may contain an archive of data or program files; which a client submits a request for a file, the server transfers a copy of the file to the client” (*Final Office Action*, p. 11), an interpretation of the processor 103 of the pump 100 in De La Huerga as a web server is incorrect because the controller 260 does not retrieve information from the pump 100 over the Internet, but rather retrieves information from the pump 100 over a connecting wired cable. There is no Internet connection or network between the pump 100 and the controller 260 in De La Huerga.

A processor that links to a wired communication channel for communication with other devices does not act as a “web server”, but at best, acts as a client of the other devices. A web server is to be distinguished from a web client. One of ordinary skill in the art would readily recognize the distinction including that a web server delivers Internet content (e.g., web pages) to web clients.

Claim 14 distinguishes between a “web server” and a “web browser client device” in that the “the processor is configured to communicate with a web browser client device that is remote from the infusion pump”. De La Huerga does not describe or contemplate that the infusion pump

may perform web server functions for client devices remote from the pump. The pump 100 in De La Huerga that is connected to the wired channel 255 does not deliver Internet content to web clients, and thus, does not equate to a “web server”, as recited in claim 14.

In fact, De La Huerga describes a separate conventional web server that provides information to the pump 100. For instance, De La Huerga describes that the pump obtains information via communication channel 255 and “a remote facility server/database” [0151]. Thus, the pump in De La Huerga acts as a client of the remote facility server/database. Nowhere in De La Huerga is there a description of the pump acting as a web server. To the contrary, the description of other elements (e.g., the remote facility server/database) as performing server functions in De La Huerga indicates that the pump would not perform server functions. One of ordinary skill in the art would not consider the pump 100 in De La Huerga as a web server and, in fact, De La Huerga teaches away from the pump acting as a web server.

The secondary reference to Zerhusen was not cited for any description of a pump acting as a web server. In fact, like De La Huerga, Zerhusen describes a separate conventional web server that provides information to clients (e.g., computers). For instance, Zerhusen describes system 2000 generally includes a central server 2002, a network 2004, and a plurality of client devices 2006. The server 2002 communicates with network 2004 to transmit signals to and receive signals from a plurality of client devices 2006. (col. 27, ln. 17-37; Fig. 129).

The mere notion that the pump 100 in De La Huerga “may” be capable of performing as a web server is not enough to establish a *prima facie* case of obviousness; rather, De La Huerga must actually describe the pump 100 as acting as a web server.

Thus, because the combination of De La Huerga and Zerhusen does not describe an infusion pump comprising “a processor that acts as a web server disposed in the pump housing,

wherein the processor is configured to communicate with a web browser client device that is remote from the infusion pump”, as in claim 14, the combination does not render claims 14-19 and 21-23 obvious.

**2. The combination of De La Huerga and Zerhusen does not describe an infusion pump comprising “a unitary dual function touch screen display located on the pump housing ... wherein the first portion is configured to display a pump information screen and wherein the second portion is configured to concurrently display a web browser screen,” as recited in independent claim 14**

The Office stated that De La Huerga describes a unitary display located on the pump that displays parameter settings, but that De La Huerga does not teach that the pump is a “dual function touch screen display”, or a “second portion is configured to concurrently display a web browser screen,” as recited in claim 14. (*Final Office Action*, p. 3).

The Office stated that the secondary reference to Zerhusen describes a touch screen with two portions displayed simultaneously by alleging that a first portion is met by element 630 and the second portion is met by element 632 in Figure 43, and that the second portion is configured to “display an Internet icon that actuates a customized home page or other Internet connection”. (*Final Office Action*, p. 3-4). The Office stated that it would have been obvious to one of ordinary skill in the art to combine the teachings of De La Huerga and Zerhusen

The Office’s interpretation of the combination of De La Huerga and Zerhusen in view of the claims is incorrect because the combination fails to describe an infusion pump including “a unitary dual function touch screen display located on the pump housing ... wherein the first portion is configured to display a pump information screen and wherein the second portion is configured to concurrently display a web browser screen,” as recited in independent claim 14.

Like De La Huerga, Zerhusen also does not describe an infusion pump comprising “a unitary dual function touch screen display located on the pump housing”, as in claim 14. Zerhusen describes a general patient/nurse computer that may include a touch screen display. There is no description in Zerhusen of an infusion pump that includes “a unitary dual function touch screen display located on the pump housing”.

Zerhusen also does not describe a second portion of any type of screen display “configured to concurrently display a web browser screen,” as in claim 14. The cited portion of Zerhusen that is alleged to describe this claim limitation (Figure 43 in Zerhusen reproduced below) illustrates a display of a general computer with a plurality of computer icons organized as caregiver icons 630 and patient icons 632 (one of which is an Internet icon 658) (col. 14, ln. 3-12). In Figure 43, reference 628 is the touchscreen, and reference numbers 630 and 632 simply reference a left or right side of the touchscreen 628, in contrast to a first and second portion where “the first portion is configured to display a pump information screen and wherein the second portion is configured to concurrently display a web browser screen,” as recited in independent claim 14. Zerhusen does not describe that the touchscreen 628 includes any capability to “concurrently display a web browser screen” with a “pump information screen” on the separate sides 630 and 632 of the touchscreen 628.

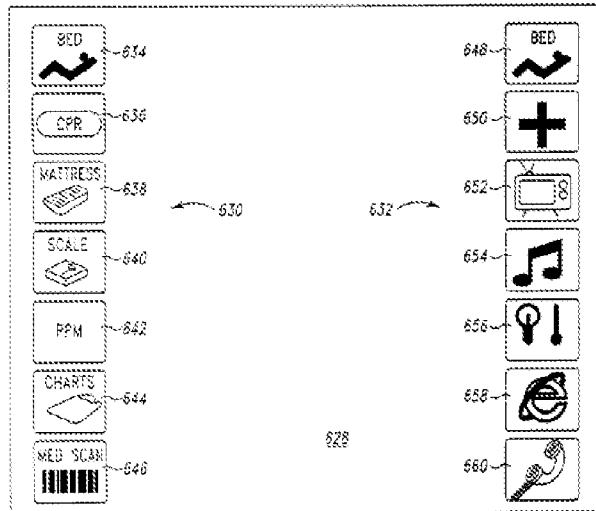


Fig. 43

Figure 43 of Zerhusen (reproduced)

Zerhusen merely discloses a touch screen capable of displaying multiple icons at one time, one of which can be used to establish an Internet connection (col. 14, ln. 3-12, col. 16, ln. 40-47). Zerhusen states, “[b]y activating one of the icons, menus are called up and displayed on the touch screen.” (col. 13, ln. 50-53). Zerhusen also teaches, “[w]hen Internet icon 658 is touched, a customized home page or other Internet connection is made.” (col. 16, ln. 40-41). Zerhusen does not teach or disclose that once the “Internet icon” is touched making an Internet connection, a pump information screen is concurrently displayed on the screen.

Thus, contrary to the statements by the Office, in the cited combination, there is still no description of “a unitary dual function touch screen display located on the pump housing”, as in claim 14.

The Office cited to De La Huerga for description of a pump that displays pump data, and to Zerhusen for description of a general computer that displays an Internet icon, and stated that it would have been obvious to combine the teachings of De La Huerga and Zerhusen to arrive at the claimed invention of “a unitary dual function touch screen display located on the pump housing ... wherein the first portion is configured to display a pump information screen and wherein the

second portion is configured to concurrently display a web browser screen,” (claim 14) because in the combination, each element merely would have performed the same function as it did separately. (*Final Office Action*, p. 4).

However, when the elements in De La Huerga and Zerhusen are combined and are arranged to merely perform the same function as they do separately, then the resulting combination includes two separate and distinct displays. The only way to arrive at the present invention of “a unitary dual function touch screen display” using teachings of De La Huerga and Zerhusen is to alter a function of one or both the infusion pump display in De La Huerga and the general purpose computer display in Zerhusen, in which case the alleged “known elements” would not “merely perform the same functions”. For instance, to arrive at the present invention, functions or structure of the pump in De La Huerga would have to be modified to be configured to provide a “a unitary dual function touch screen display”.

To establish a *prima facie* case of obviousness, the Office must show that the cited references disclose all elements of the claims. *See e.g., Honeywell Int'l, Inc. v. United States*, 609 F.3d 1292, 1300-1301 (Fed. Cir. 2010) (the claimed invention was held non-obvious since the cited references did not disclose all elements of the claims). The Office has not proven that the combination of the cited references includes “a unitary dual function touch screen display located on the pump housing”.

Thus, because the combination of De La Huerga and Zerhusen does not describe all elements of claim 14, the combination does not render claims 14-19 and 21-23 obvious.

**3. The combination of De La Huerga and Zerhusen would logically result in something that is altogether different than the invention recited in claim 14**

Embodiments of the claimed invention can include an infusion pump assembly having a display connected to and operated by a computer processor contained within the pump's housing. The display can also have two discrete portions such that the display is capable of displaying two different types of information concurrently on the display screen. The first display portion can be configured to display pump information and the second display portion can be configured to display a web browser. This allows the user of the infusion pump to be able to monitor pump information while simultaneously accessing other types of information through a web browser. For example, one type of information that could be accessed is a nurses' task list. This would allow a nurse to both monitor pump operation and determine what other tasks need to be performed simultaneously without having to change computer terminals. Thus, the infusion pump screen recited in claim 14 has sufficient real estate and is configured as a multi-function display rendering separate screens unnecessary. The infusion pump recited in claim 14 enables browsing of pump information on a first portion and web information on a second portion.

Claim 14 requires a first portion configured to display a pump information screen and a second portion configured to concurrently display a web browser screen. Thus, both the pump information screen and the web browser screen are displayed and viewable. The web browser screen does not overlay onto the pump information screen rendering a view of the pump information screen obstructed.

It is clear that De La Huerga only describes a pump that displays pump data. De La Huerga does not describe a pump including a second portion that is configured to concurrently

display a web browser screen. (*Final Office Action*, p. 3). It is also clear that Zerhusen does not describe a pump including a second portion that is configured to concurrently display a web browser screen. The general purpose nurse’s computer in Zerhusen is not an infusion pump.

Moreover, the general purpose nurse’s computer in Zerhusen is not configured to display pump data with a web browser screen concurrently on the same display. The display screen on the general purpose nurse’s computer in Zerhusen is not a screen on a piece of medical equipment that is being made more useful to a clinician like the “a unitary dual function touch screen display located on the pump housing,” as recited in claim 14. The cited art requires functions of medical devices and functions of general purpose computers to remain separate and distinct, while the claimed invention provides dual functionality within the medical device.

The combination of De La Huerga and Zerhusen results in two separate and distinct displays on separate devices (i.e., a general purpose computer display of Zerhusen and an infusion pump display of De La Huerga). Combining two displays does not result in “a unitary dual function touch screen display”. In addition, there is no description or mention within the combination of De La Huerga and Zerhusen of “concurrently” displaying the claimed two pieces of information on one display, nonetheless, to concurrently display this information on an infusion pump display. The cited references that describe to independently display pieces of information on two separate and different devices do not contemplate a unitary dual function touch screen display in a pump housing for “concurrently” displaying the claimed information.

To modify De La Huerga in view of Zerhusen would result in modifying the patient/nurse computer stations of De La Huerga (e.g., controller 260 in Figure 26) to display Internet icons. The resulting combination does not change/modify any aspects in De La Huerga of components

of the infusion pump that are included within the pump housing. The resulting combination simply includes no description of an infusion pump displaying a web browser screen.

The teachings for “concurrently” displaying “a pump information screen” and “a web browser screen,” as recited in claim 14 are found in the Applicant’s specification, and not in the cited art. The cited combination of art includes no description of such a link of the infusion pump having a unitary dual function touch screen display that has a first portion configured to display a pump information screen and a second portion configured to concurrently display a web browser screen. Neither of De La Huerga nor Zerhusen provides any reasoning or motivation for modifying the pumps in De La Huerga to have the function of the general purpose computer in Zerhusen. The Office’s conclusion of obviousness is based on improper hindsight reasoning because the conclusion is based on knowledge gleaned from Applicant’s disclosure (*see* MPEP § 2145(X)(A)).

Because the combination of the cited art results in something altogether different than as claimed in claim 14, the cited combination does not render claims 14-19 and 21-23 obvious.

## **B. Response to Rejection of Claims over De La Huerga, Zerhusen, and Campbell**

Claim 20 stands rejected under 35 U.S.C. § 103 as being unpatentable over US Pub. 2002/0038392 (De La Huerga) in view of USP 7,154,397 (Zerhusen) and USP 6,208,974 (Campbell). Campbell was cited for a description of a “caregiver task list”. However, Campbell does not make up for the deficiencies of the combination of De La Huerga and Zerhusen, as described above. Thus, because the combination of De La Huerga, Zerhusen, and Campbell does not describe all limitations of independent claim 14, dependent claim 20 is not obvious in view of the combination.

### **C. Conclusion**

Applicant has demonstrated that the rejections of claims 14-17 and 19-24 are in error as a matter of law, and requests withdraw of the rejections and allowance of the pending claims.

Respectfully submitted,

Date: September 8, 2011

By: /MRC Reg. No. 37298/

### **VIII. CLAIMS APPENDIX**

1.-13. (Cancelled)

14. (Previously Presented) A system for administering medication to a patient comprising:

an infusion pump comprising:

a pump housing,

a processor that acts as a web server disposed in the pump housing, wherein the processor is configured to communicate with a web browser client device that is remote from the infusion pump,

a unitary dual function touch screen display located on the pump housing and in communication with the processor, wherein the dual function touch screen display comprises a first portion and a second portion, wherein the first portion is configured to display a pump information screen and wherein the second portion is configured to concurrently display a web browser screen.

15. (Previously Presented) The system of claim 14 wherein the pump information comprises a digital photo of a patient the infusion pump is currently associated with.

16. (Previously Presented) The system of claim 14 wherein the pump information comprises pump monitor information.

17. (Previously Presented) The system of claim 16 wherein the pump monitor information includes infusion pump operating parameters selected from a group of infusion pump operating parameters consisting of dose, rate, duration and volume.

18. (Canceled)

19. (Previously Presented) The system of claim 14 wherein the processor supplies the web browser client device with web browser information.

20. (Previously Presented) The system of claim 19 wherein the web browser information includes a caregiver task list.

21. (Previously Presented) The system of claim 14 wherein the processor supplies the web browser client device with pump information.

22. (Previously Presented) The system of claim 14 further comprising:

    a medication management unit in electronic communication with the infusion pump and having a processing unit and a storage medium coupled to the processing unit, the storage medium containing programming code executed by the processing unit to:

        store infusion pump operating parameters specific to a patient and a digital photo of the patient in the storage medium;

transmit the infusion pump operating parameters specific to a patient and the digital photo of the patient from the medication management unit to the infusion pump; and

wherein the processor of the infusion pump receives the infusion pump operating parameters specific to a patient and the digital photo of the patient from the medication management unit and displays the infusion pump operating parameters specific to a patient and the digital photo of the patient as pump information.

23. (Previously Presented) The system of claim 15 wherein the digital photo of a patient the infusion pump is currently associated with is transmitted directly to the infusion pump by a patient identification indicator device located on the patient.

24. (Previously Presented) The system of claim 14 wherein the processor is configured to permit a remote web browser to associate with the infusion pump to configure the infusion pump.

## **IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.